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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/618,498 | 07/11/2003 | Rich Huang | 252011-1520 | 5392 |
| 47390 | 7590 | 06/02/2005 | EXAMINER | |
| THOMAS, KAYDEN, HOSTEMEYER & RISLEY LLP 100 GALLERIA PARKWAY SUITE 1750 ATLANTA, GA 30339 | | | ADAMS, GREGORY W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3652 | |

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/618,498 | Applicant(s) HUANG ET AL. | |
| | Examiner Gregory W. Adams | Art Unit 3652 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 11, 12, 16-18, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6,10,13-15,19,22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonora et al. (US 6,481,558).

With respect to claim 1, referring to FIGS. 1-10 Bonora et al. disclose Load port transfer device 10 comprising a wafer carrier 12, conveyor 14, load port 22, 120, path which includes a vertical component 16 and a horizontal component 14, wherein a vertical component comprises a top portion 60, 65 connected to horizontal component 132 and a bottom portion 66 which extends from load port 22, and a robot 60 which moves on a path for transferring a wafer carrier from load port to conveyor. Col. 4, Ins. 38-40.

With respect to claim 2, referring to FIG. 9 Bonora et al. disclose an L-shaped path as completed by horizontal component 64 and vertical component 72.

With respect to claim 3, referring to FIG. 4 Bonora et al. disclose that horizontal component 64 is above the conveyor 14.

With respect to claim 4, referring to FIG. 5-10 Bonora et al. disclose a robot 60 with a moving mechanism 78 in path 72 and a holding mechanism 64 to hold wafer carrier in horizontal position. See also col. 7, ln. 54-55.

With respect to claim 5, referring to FIG. 5-10 Bonora et al. disclose a holding mechanism 64 with a first end 65 which connects to wafer carrier 12, and a second end which connects to the moving mechanism. Col. 7, ln. 54-55.

With respect to claim 6, referring to FIG. 10 Bonora et al. disclose a first end 65 having a gripper to grasp the wafer carrier. Col. 9, ln. 4-5.

With respect to claim 10, referring to FIG. 9 Bonora et al. disclose a moving mechanism 78 having a timing belt 86,94.

3. With respect to claim 13, referring to FIGS. 5-10 Bonora et al. disclose a load port transfer device 10 for delivering a wafer carrier 12 to a conveyor 14 including a load port 120, path 72, vertical component 72, horizontal component 64, robot 60, moving mechanism 78, holding mechanism 64, first end 65 to hold wafer carrier 12, and second end on the moving mechanism 78. See also col. 7, lns. 54-55. In addition, the vertical component 72 is beside conveyor 14 and the bottom portion extends from the load port 120.

With respect to claim 14, referring to FIG. 10 Bonora et al. disclose an L-shaped path 72.

With respect to claim 15, referring to FIGS. 5-10 Bonora et al. disclose a first end 65 shaped like a gripper. Col. 7, lns. 54-55.

With respect to claim 19, referring to FIGS. 5-10 Bonora et al. disclose a moving mechanism 78 having a timing belt 86,94.

4. With respect to claim 22, referring to FIGS. 5-10 Bonora et al. disclose an intra-bay delivery system 10 having a wafer carrier 12, load port 120, conveyor 14, rail 72,

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vertical component 72, horizontal component 64, roller 82, robot 60, holding mechanism 64, flanged 65, and a second end on the moving mechanism 78.

Response to Arguments

5. Applicant's arguments filed Feb. 10, 2005 have been fully considered but they are not persuasive.

6. First, applicant argues that Bonora does not disclose an elevator which moves along a path. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an elevator which moves along a rail) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In its broadest sense, a path defines "a route or course". WWW.dictionary.com. Thus, applicants use of structure to define a path shows that Bonora's disclosure of a path which includes a vertical component 16 and a horizontal component 14 equates to movement along a path.

7. Next, applicant argues with respect to claim 1 that Bonora does not disclose a path or robot which moves along a path. As shown above in 102(b) rejections, Bonora discloses a robot which moves along a path in vertical and horizontal components which places a wafer carrier at a load port. There is both a vertical movement and horizontal movement. Further, Bonora discloses two horizontal movements, i.e. between work stations and from a rail onto a load port.

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8. Finally, applicant did not locate a bottom portion or vertical component. As further defined under 102(b) rejections and repeated here, Bonora discloses "...path which includes a vertical component 16 and a horizontal component 14, wherein a vertical component comprises a top portion 60, 65 connected to horizontal component 132 and a bottom portion 66 which extends from load port 22..."

9. Applicant argues that Bonora does not disclose a rail which extends from a load port. Setting aside the fact that applicant does not claim this, referring to FIG. 1 Bonora discloses a rail 14 which extends from work station to work station.

10. Applicant next argues with respect to claim 13 that Bonora does not disclose a path or robot with rollers. Path was addressed under claim 1 responses above. Bonora discloses a robot 60 including a moving mechanism on the path 78 for transferring a wafer carrier between a load port and conveyor holding mechanism 64 wherein a first end holds 65 wafer carrier and a second end on the moving mech. Col. 7, Ins. 54-55.

11. Finally, applicant argues with respect to claim 22, that Bonora does not anticipated the limitations emphasized, but provides no arguments as to why. As recited above under 102(b) rejections, broadly construed Bonora discloses all the limitations recited in applicants claim 22.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th, 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GWA



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